

In accordance with the guidelines and waived provisions of 37 C.F.R. 1.121 promulgated in the USPTO announcement of January 31, 2003, please make the following amendments.

IN THE CLAIMS:

Please amend the claims as follows:

1. (Previously Presented) A method for fabricating a semiconductor device comprising the steps of:

distributing a nonmetal element composed of an oxygen element, a nitrogen element or a fluorine element in a region in the vicinity of a surface portion of a semiconductor layer;

depositing a metal film on said semiconductor layer; and

epitaxially growing a semiconductor-metal compound layer in the surface portion of said semiconductor layer by causing a reaction between an element included in said semiconductor layer and a metal included in said metal film through annealing carried out on said metal film.

2. (Original) The method for fabricating a semiconductor device of Claim 1, wherein the step of distributing said nonmetal element includes the steps of:

forming a compound layer including a semiconductor element and said nonmetal element on said semiconductor layer;

distributing said nonmetal element included in said compound layer in the region in the vicinity of the surface portion of said semiconductor layer through recoil by irradiating said compound layer with a particle energy beam; and

removing said compound layer.

3. (Original) The method for fabricating a semiconductor device of Claim 1, wherein the step of distributing said nonmetal element includes the steps of:

forming a compound layer including a semiconductor element and said nonmetal element on said semiconductor layer; and

distributing said nonmetal element included in said compound layer in the region in the vicinity of the surface portion of said semiconductor layer through recoil and removing said compound layer by irradiating said compound layer with a particle energy beam.

4. (Original) The method for fabricating a semiconductor device of Claim 2 or 3, wherein said semiconductor layer has a face-centered cubic crystal structure, said semiconductor-metal compound layer has a face-centered cubic crystal structure, and said compound layer is amorphous.

5. (Original) The method for fabricating a semiconductor device of Claim 2 or 3, wherein said particle energy beam includes a nonmetal element.

6. (Original) The method for fabricating a semiconductor device of Claim 1, wherein said semiconductor layer has a face-centered cubic crystal structure, and said semiconductor-metal compound layer has a face-centered cubic crystal structure.

7. (Original) The method for fabricating a semiconductor device of Claim 1, wherein said semiconductor layer has a diamond or zinc blende crystal structure, and said semiconductor-metal compound layer has a calcium fluoride crystal structure.

8. (Original) The method for fabricating a semiconductor device of Claim 1, wherein said semiconductor layer is a silicon layer, said nonmetal element is oxygen, said metal film is a cobalt film, and said semiconductor-metal compound layer is a cobalt silicide layer.

9. (Canceled)

10. (Original) The method for fabricating a semiconductor device of Claim 8, wherein the step of distributing said nonmetal element includes a step of forming a silicon oxide film on said silicon layer and distributing oxygen included in said silicon oxide film in the region in the vicinity of the surface portion of said silicon layer by irradiating said silicon oxide film with the said particle energy beam.

11. (Previously Presented) A method for fabricating a semiconductor device comprising the steps of:

forming a gate electrode on a semiconductor layer;

forming impurity layers on both sides of said gate electrode in said semiconductor layer;

distributing a nonmetal element composed of an oxygen element, a nitrogen element or a fluorine element in a region in the vicinity of a surface portion of said semiconductor layer;

depositing a metal film on said semiconductor layer; and

epitaxially growing a semiconductor-metal compound layer in the surface portion of said semiconductor layer by causing a reaction between an element included in said semiconductor layer and a metal included in said metal film through annealing carried out on said metal film.

12. (Original) The method for fabricating a semiconductor device of Claim 11, wherein the step of distributing said nonmetal element includes the steps of:

forming a compound layer including a semiconductor element and said nonmetal element on said semiconductor layer;

distributing said nonmetal element included in said compound layer in the region in the vicinity of the surface portion of said semiconductor layer through recoil by irradiating said compound layer with a particle energy beam; and  
removing said compound layer.

13. (Original) The method for fabricating a semiconductor device of Claim 11, wherein said semiconductor layer is a silicon layer, said nonmetal element is oxygen, said metal film is a cobalt film, and said semiconductor-metal compound layer is a cobalt silicide layer.

14.-16. (Canceled)